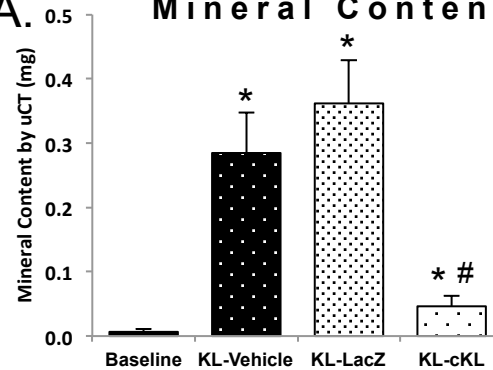
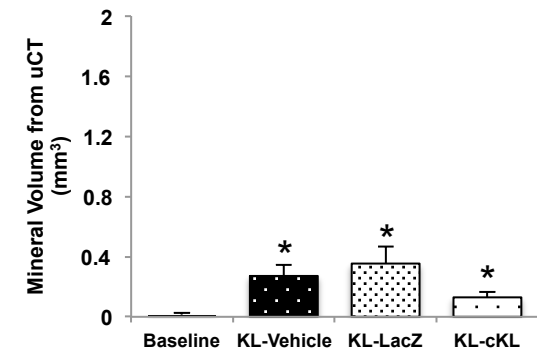
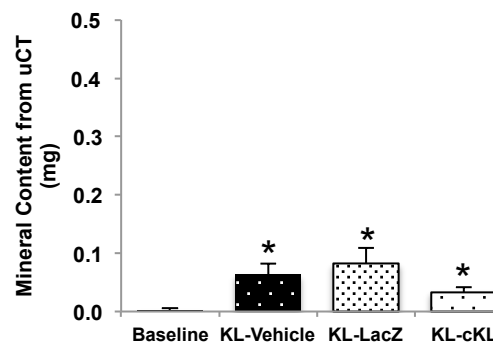
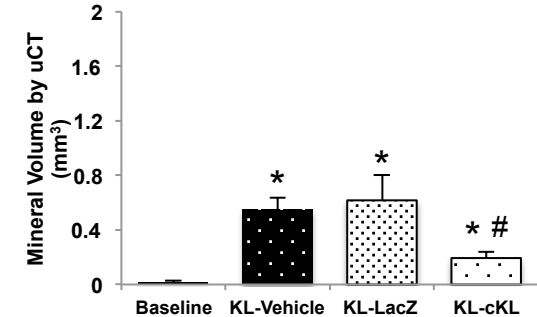
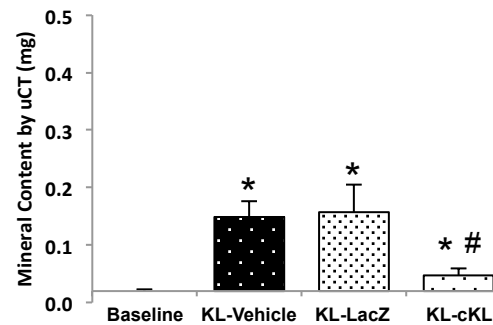
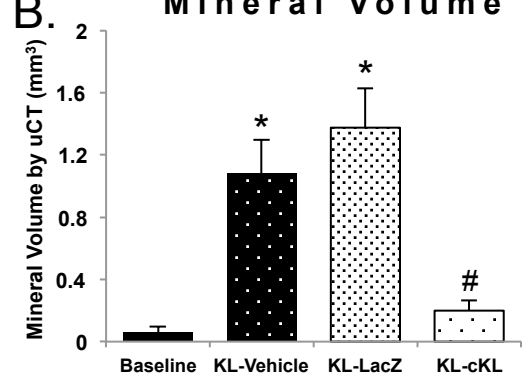


A. Mineral Content



B. Mineral Volume



Supplemental Figure 1. Regional differences of cKL effects on aortic calcification: The aorta analysis was divided into three regions: Region-1: ascending aorta, aortic arch and part of the descending aorta to the second thoracic vertebra; Region-2: descending aorta from the thoracic region to the abdominal aortic bend at the last thoracic vertebra; Region-3: descending aorta starting from the abdominal aortic bend, abdominal aorta, and common iliac arteries to the second sacral vertebra. Segmental analysis of the aorta revealed that in the ascending aorta/aortic arch αKL -null mice treated with AAV-cKL displayed the greatest reduction in mineral content and volume (~82-87%; $p < 0.005$) in Region 1). In the descending aorta (Region 2) aortic mineral content was 68-70% versus controls ($p < 0.05$). No statistically significant changes were observed in the descending aorta including the abdominal aorta and common iliac arteries (Region 3). Enlarged image of mouse aorta on left is labeled with the three regions for quantification (representative image is from the LacZ group of αKL -null mice and different from that in Figure 3); (A) All regions of KL-Vehicle and KL-LacZ mice had higher mineral content compared to four-week-old αKL -null baseline mice ($*p < 0.05$). cKL delivery reduced mineral content in regions 1 and 2 ($\#p < 0.05$ vs KL-Vehicle and KL-LacZ). (B) Mineral volume was higher in KL-vehicle and KL-LacZ mice than four-week-old αKL -null baseline mice in region all regions ($*p < 0.05$). The mineral volume of region 2 and 3 was significantly increased in all treatment groups compared to four-week-old baseline αKL -null mice ($*p < 0.05$). AAV-cKL treated αKL -null mice had significantly reduced mineral volume in region 1 and 2 compared to both KL-Vehicle and KL-LacZ treated mice ($\#p < 0.05$).